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DIPLOMA ENGROSSING

NOTE ON FRONTISPIECE TLLUSTRATION

These two plans are typical of layouts in which the seal is differently placed. The rest of the diploma follows the usual formal arrangement. The curved title makes it attractive and accommodates the seal without causing too much white space. The horizontal heading admits a more compact plan and the seal, if used, is worked in at lower left as is customary with such layouts. In the placing of the diploma form on the paper, it is better to have large margins and more at the bottom than at the top. It is not always possible to use these layouts on all diploma forms. The arrangement must accommodate the required wording. Usually the name of the school is the largest and the size of the name of the graduate is larger than the course line. If the layout develops so that the date line does not go well in the lower center it may be placed at the extreme left or right. The diploma will balance well if the long lines near the bottom are the same length as the large title line at the top. If the name of the school is short at the top, it may be lettered in extended style to approach the proper width. It should not look stretched, nor should it be wide letter-spaced. The length of line and space given for the signatures should be enough so that they will not need to be written in a cramped hand. The signature lines authenticate the diploma and should be adequate.

John Manthorne High School

This is to certify that

Genevieve IJ. Morrison

completed the General Course of Four Hears

and through faithfulness and competence qualified for graduation

Superintendent	President	Peineipul

The Benjamin Franklin Institute

Sylvania, Ut.

This diploma is awarded to

Frederick E. McCabe

who completed the

Course of Four Years

and by proficiency in scholarship has merited graduation

	Date
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	Nonces

Diploma Engrossing

By RALPH A. LOOMIS

Instructor in Printing, Dickinson High School, Jersey City, N. J.



THE Manual Arts Press, PEORIA, ILLINOIS

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By RALPH A. LOOMIS

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PRELIMINARY EXPRESSION

This work is dedicated to my wife, who helped with constructive criticism and encouragement. The closeups, taken by my son, Lawrence, provided added incentive to prepare the subject matter.

Preface

This production was prepared for the special purpose of giving help in diploma engrossing. All of the directions are based on actual independent experiences through which the author has gone in his work. Many of them may have been peculiar to him, but probably they would be encountered by anyone else attempting to do the work unassisted.

Details have been included which point out stumbling places and how to avoid them. After the subject matter has been studied and all of the work mastered, then the ambitious engrosser should be able to go on independently.

Modern engrossing is based on the magnificent work of the monks done during the fifteenth century. It has never been surpassed. Their craftsmanship is the inspiration for all that is done now, and only by returning to study their specimens frequently will the modern engrosser keep up-to-date.

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Equipment

Pens and Inks

The kind of pen that is best to use in general diploma engrossing is the double-nib, ink-container pen. It

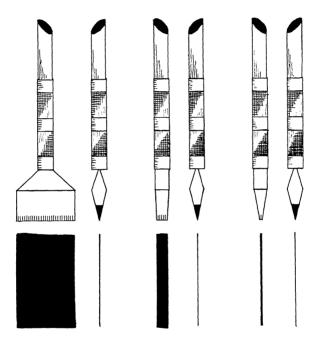


PLATE 1. SKETCHES OF PENS SHOWING FLAT AND SIDE VIEWS

They all appear the same on the sides. Sizes between the widest and the narrowest are not shown, but they range all the way between. It will be noted how the supply of ink is controlled by the cuts in the nib. As the letters are made, the slightest pressure releases the ink, which is held between the nibs as a reservoir. The pen cannot spread. It maintains a uniform width of line. When the pen nibs are properly adjusted and the proper ink is used, the pen will mark perfectly. Handles are of normal penholder length.

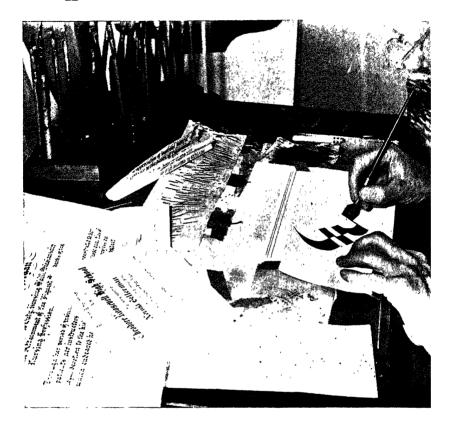


PLATE 2. PROPER POSITION OF THE HAND WHEN HOLDING PEN

It will be noted that the beginning and end of the stroke show that the pen was not changed. Also note that the horizontal and vertical guide-line sheet is in position for engrossing and that the guides are so placed that the names will come in the proper place. A completed diploma is at the left. There is also a dummy sheet, partly rolled after having been used in making a small scroll. The pen-and-ink holder is at the top left, with the larger Eternal ink bottle next to it. The larger pen block shows with its pens.

ranges in width from $\frac{1}{16}$ " to about $\frac{7}{8}$ ". See Plate 1. An ingenious worker will alter his pens to suit the job that is about to be done. They may be so filed that they meet the immediate need. See Plate 2.

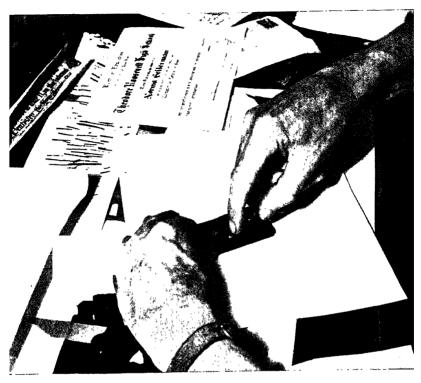


PLATE 3. SHARPENING THE PEN

It is held carefully and lightly and, with a slight pressure, is drawn over the oilstone. This job is done to keep the pen sharp. If it becomes rounded or dull, inferior lettering will result. A finished diploma shows at the upper left.

If the pen becomes worn and does not give a sharp, clear-cut mark it may be sharpened on an oilstone. See Plate 3. If this is carefully done, it will be kept in excellent condition. Because pens are composed of a rather soft alloy to prevent scratching, they will wear down fast if sharpened too heavily.

To clean the pens, draw a piece of tough paper between the nibs, carefully. See Plate 4. It can be moist to take up the ink better. Do not put pens away that have not been cleaned.



PLATE 4. CLEANING THE PEN

The pen should be cleaned when the ink in it is liquid. Dried ink in the pen is hard and fills the fine cuts in the nib. These cuts insure a proper flow of ink.

For diploma work, the best ink is India. It is produced by several reputable American ink companies. There are also good inks imported from France and China. The engrosser should familiarize himself with the various brands and decide on what ink he can use best. It should suit his individual taste.

Pen Holders

A good pen stand is a block of wood about $8" \times 3" \times 2"$



PLATE 5. ACTUAL JOB OF ENGROSSING A NAME ON A DIPLOMA ON THE LIGHT TABLE

The list is at hand and the pens and ink are in easy reach. Note the easy, not tensed manner of holding the pen. Pieces of masking tape hold everything in place.

drilled with holes the size of the pen handle. See Plates 2 and 5.

Another handy stand is a wood block cut and drilled out to hold a common 25¢ bottle of waterproof ink and also drilled with a number of holes to hold the pens that are being used on a particular job. See Plates 5, 6, and 6A.

A T square, ordinary triangle, a ruling pen, and a fine-point pen are the only tools needed.



PLATE 6. RULING SIDES OF LETTERS

A ruling pen, T square, and triangle are used. The pen is held so that no ink will get on the triangle, which would cause it to run under and blob the line. The ink should have dried on the letter when doing this ruling. A steady hand is needed. A line of numbered lettering is shown that has been used in centering. A pasted dummy that was actually used on a job shows in the picture. Masking tape holds everything in place.

The Light Table

All of this work should be done on a "light" table. The light table is a plate-glass-topped table which has a light underneath. See Plate 7A. This table may be so constructed that it is most convenient and comfortable for the person who uses it. It should have plenty of leg room and the proper height so that the engresser will not be compelled to work in a cramped

position. It is best not tilted. A tilted table top permits pens and ink to slide forward and interferes with the worker as he does his engrossing. If built at the proper height, the level top is the best.

The value of the light table is that it eliminates the use of guide lines being made directly on the job. This facilitates the work greatly. If the lines are drawn directly on the paper, they must be erased after the job is finished. This means more work, and besides, in the erasing, the sheen of the paper is erased, along with some of the color of the lettering ink, and the freshness of the whole job is impaired. It is not possible to get out all of the marks of the guide lines. It is possible to do practice work directly on guide lines, but it is best to become used to the light table.

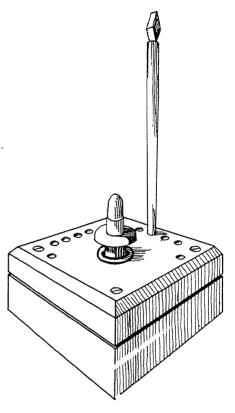


PLATE 6A. SMALL PEN-AND-INK STAND

Very handy. The two-piece block was drilled out to fit an ordinary bottle of waterproof ink. The two parts are held together with screws in each corner. Around two sides, the block is drilled to hold a number of pens that are used as the job is being done. This block will not tip over, and the bottle may be filled without taking it apart.



PLATE 7. MANNER OF EMBELLISHING ENGROSSED NAMES

A fine springy pen is used. The marks are put on in sweeping curves, with the arm swinging in circular movement and the pen touching lightly. This job must be done right the first time, deliberately, regular and even, and the ends finished with a nice part of a circle. The same pen is used to finish the serifs and other parts of letters.

When the guide lines are drawn and the size of the job is determined, the area other than that occupied by it should be masked out with black paper or an opaque paper so that the excess light will not shine up to give undue eye strain and cause the eyes to squint to exclude this outside light. All of these papers can

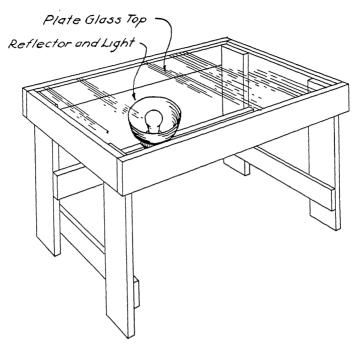


PLATE 7A. THE LIGHT TABLE

The light table may be built of hardwood, screwed together. The plate glass should be as heavy as possible—at least 3%" thick, or more—and should be set down in the sides so that it will be level with the sides. The board on the left top should be straight and true and square, as this is the edge where the T square will rest while doing the engrossing. The whole table should be square and sturdy. It does not need to be heavy, but rigid, so that it will not be unsteady while being used. A 5-watt light should be strong enough, possibly too strong. Its strength must be determined by the engrosser. The reflector may be any commercial product. The bracket should be mounted so that the light will come where it is needed.

be held in place with masking tape, which may be stripped off and used again. See Plate 5.

Light tables are on the market, but a man handy with tools could make one that would fit his stature.

Getting Ready for the Job

Manner of Working

The best posture for the engrosser as he is doing his work is an upright sitting position with the paper directly in front and straight—not at an angle.

The general conditions around the engrosser doing his work should be such that he may do his best job. Distractions may cause mistakes that may not be noticed until the whole job has been finished. Then the piece of work must be done over. Usually it is not possible to erase mistakes, especially if a word is left out or put in. This is discouraging and expensive. Of course, it is better to work carefully and not make mistakes; but they do occur.

A careful workman will work out a system to prevent mistakes. When diplomas are being done, the exact spelling should be noted. For instance, if the engrosser reads a name such as "Mabel," normally spelled that way, and goes ahead and puts it on that way in his hurry to get it done quickly, then, at second glance, finds this name should have been spelled "Mable," here is a mistake he might never have discovered. It is never wise to depend on first glances.

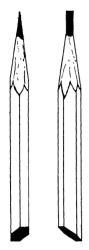
The list of names should be well lighted and a marker placed over the last name done and moved down as the engrossing of the list proceeds. This will obviate skipping names. Many times, as already said, unusual spellings of ordinary names will invite errors. They must be watched. Many long names of European source must be copied letter for letter to get them

correct, and modern American schools have many students of foreign ancestry.

When a scroll is to be done, particular care must be exercised to avoid errors. A perfect dummy must be made first, especially with regard to the spelling. Then, when actually doing the scroll, the dummy should be held in a roll and each line copied directly on the job as the dummy is rolled up. In this way, only one line at a time on the dummy will be followed and not anything on the line above or below seen. The dummy should be held as close to the job being done as possible, which is directly above the line. The mind must be kept on the job. Wandering thoughts tend to let mistakes creep in.

There are many persons who simply cannot ever accomplish this work satisfactorily. Excitable temperaments prevent its proper execution. A person who goes into a tantrum over an error should learn to control all such tendencies. Patience is absolutely necessary. No one besides the engrosser can be blamed for mistakes. It is always well to have a good reader inspect all work before it is delivered.

It is fortunate to be able to watch an experienced engrosser work. He has attained his skill only after determined and careful practice. But there are times even when the experienced man cannot do his best work properly. If he is tired or nervous he cannot do his best. If he has carried a bundle in his right hand, recently, there is likely to be an unsteadiness that will cause his hand to shake or make it impossible for him to control his pen to form the letters properly. Cigarettes or other nerve irritators can cause an unsteadiness. It has been found that a left-handed person



cannot form the letters in the proper way.

This work requires good eyesight, especially in ability to see detail. The engrosser must be able to examine his work critically and see whether it is well done or not. If his state of being is not equal to doing a good job at that particular time, then he should put it off until he is able to do it properly, or find he has wasted his time.

Pencil Practice

Before the pen is used, it would be well to practice lettering with a pencil that has

PLATE 8. THE "CHISEL"-POINT PENCIL

In making the letters, it is held at the same slant as the pen. A soft lead is best, but it will wear down fast and must be sharpened frequently to give satisfactory, sharp letters. Use fine sandpaper for sharpening pencils.

PLATE 9. How to Hold the Pen

The pen is held at an angle of 45° in doing ordinary engrossing. Very rarely is there an exception, although there are times when the angle must be altered to make a



word longer or shorter to fit a certain space. It will be noted that, no matter what shape of exercise is being made, the pen is held at the beginning and ending at the same angle, and is maintained at that angle all through the making of the letter. To attain this ability, practice making all possible marks inside the proper angle.

been sharpened to a "chisel" point. See Plate 8. A soft lead is best. Varying widths of letters may be made with different widths of pencil leads.

The chisel point is made by cutting away the wood, leaving the round lead without a point. Then, with very fine-grain sandpaper, carefully rub the lead, with a stroke away rather than toward the person sharpening. This should be done on both sides of the lead, which will produce a fine flat edge or chisel point.

Use of Pen

The pen is held in the same manner as the pencil, in the position usually held in doing Spencerian writing. It should be held naturally, between the second joint of the first finger and the joint of the first finger and the hand. The first finger should not be kinked up at the second joint, but should hold along the handle of the pen. See Plate 5.

The angle of the pen should be about 45° to the line of the guide lines. See Plate 5. This angle may be varied to secure different weights of line with the same pen. The steeper the angle the narrower the weight of line. The flatter the angle the wider the weight of line. The angle is determined by the job that is being done but in most cases the best angle is 45°. See Plates 9, 10, and 11.

Filling the Pen

Care should be taken in filling the pen so that no ink is left on the outside of the nibs. This is best done with the rubber-bulbed, glass dropper that comes with certain brands of waterproof ink. See Plate 12. A small brush could also be used.



PLATE 10. ANGLES OF PEN DETERMINE WIDTHS OF LETTERS

When the pen is held at different angles, the widths of letters are changed. The vertical mark at the left of each line is made with the same pen, held at the angle indicated by the slant guide lines. A large pen has been used. However, there is the same degree of variation with small pens.

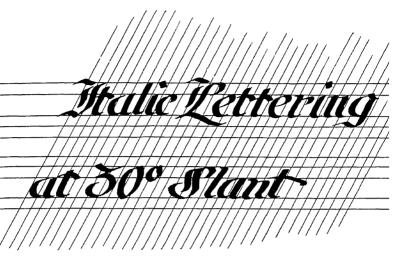


PLATE 11. How to Make Slant or Italic Lettering Draw both horizontal and slant guide lines as shown and use with the light table in the usual manner.

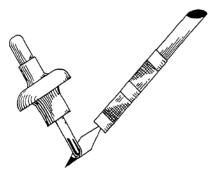


PLATE 12. How Best to Fill the Pen

The best filler is made like an eye-dropper fastened into a stopper of the ink bottle. The ink is drawn up into the dropper and released into the pen. This is necessary so that no ink is put on the outside of the nibs. It is best to learn to take enough ink in the pen to letter a name.

Horizontal Guide Lines

Before the actual practice work is begun, guide lines must be drawn upon which to letter. For all practical purposes, unless the ascending part of the letter is

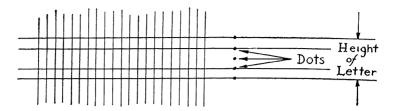


PLATE 13. METHOD OF GETTING HORIZONTAL AND VERTICAL GUI LINES FOR ANY STYLE OF LETTERING

Each dot divides a space in half. The two top and two botto dots regulate the spacing. The upper space regulates the ascen ing letters, such as l, h, k; the bottom space regulates the leng of the descending letters, such as y, p, j. Lower-case f very ofte stretches from top to bottom, but not always. This ratio of spaing is not always used in all lettering. Certain styles of lette are designed with long ascenders. But for usual work this rat is right.

extremely high, the relation of the lower-case letter and the capitals can be established as in Plate 13.

Vertical Guide Lines

With the T square and triangle, draw vertical line through the horizontal guide lines. See Plate 13. Thes lines are spaced according to the width of the line o lettering required. If wide lettering is to be used then wider vertical spacing may be done, and, with narrow lettering, narrow spacing would be necessary. The value of the vertical guide lines is that they contro the regular vertical line of the lettering, which mus not slant either backward or forward. See Plate 6.

The Basic Strokes

Foundation Exercises

With the preliminaries of how to hold the pen or pencil, guide lines drawn and in place on the light

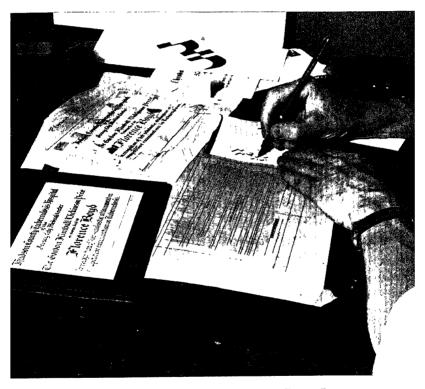


PLATE 14. VERTICAL AND HORIZONTAL GUIDE LINES

Guide lines may all be drawn on the same paper or on two layers of tissue, but if all are on the same sheet then they are at right angles. The pasted dummy is at the upper left. All the strips are held in place with transparent tape. They are in exact position. At the lower left, this particular job is shown done and in place in a leather cover. Proper way to hold the pen is shown.



PLATE 15. PRELIMINARY EXERCISES TO DEVELOP SKILL WITH THE PEN

They should be made on vertical and horizontal guide lines drawn on a sheet and used on the light table. The beginning and ending of the mark should be in a vertical line.

table, now the foundation exercises may be begun. See Plate 14.

The foundation exercises will show whether the beginner has the ability to do this kind of engrossing. How well he can do them will be a positive indication of how well he can do the actual lettering.

In doing the preliminary exercises, Plate 15, the number that should be done depends upon the quality of the work as it goes on. It is not a question of doing so many lines of exercises but how uniformly they are done. All that is necessary is the ability to make a line of these strokes and make them all look alike. They must be the same height and shape, for, in making them this way, control of the pen is secured, and later, when letters are made, they will be uniform in height and of the same character.

The First Mark

In making the first mark, the pen is held at an angle so that if it is moved at this angle only a thin line is made. See Plate 7 and Exercise 1. The fingers are not moved at all but simply hold the pen and ride along with the hand as in free-arm-movement writing taught in elementary schools. The hand does not rest on the table, but the muscles of the forearm cushion the arm and hand and allow it to move freely. See Plate 7.

It is extremely important, in fact essential, that the proper movement of the hand is understood and practiced at the very beginning. This is not writing, but is the making of letters with proper marks.

The first stroke is one in which thin and thick parts of the mark are properly made by a regular and deliberate movement. See Plate 14. It should be made deliberately—not quickly. When the stroke is finished, the angle of the pen is exactly the same as it was at the beginning of the stroke. See Plate 5. Be sure the point of the top of the stroke is vertically over the point when the pen is lifted from the paper at the bottom. If this is not done, the strokes will be slanted either backward or forward. This idea is carried over into subsequent letter practice. The making of the strokes gives practice in muscular control and experience in detail.

Second Mark

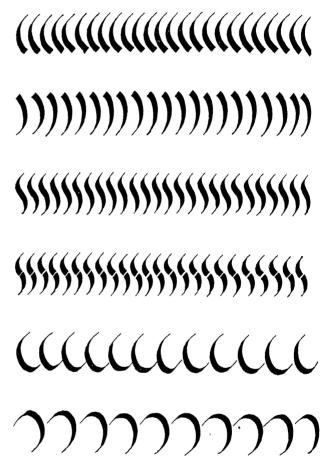
Exercise 2 is done by moving the pen in a right-side curve. The same care must be taken to make this mark as regular as the first one.

Third Mark

In Exercise 3, a combination of the left-hand and right-hand marks is made. This gives further practice in control and should not be attempted until the first two are competently done.

Fourth Mark

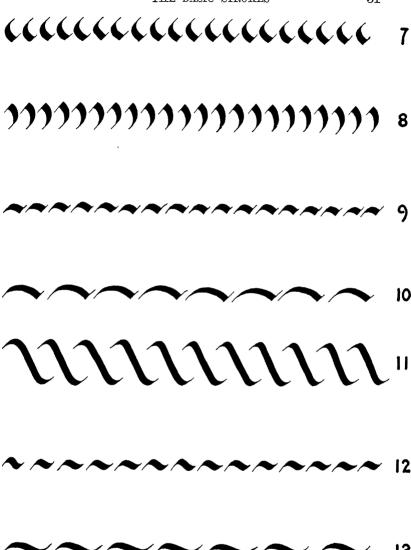
Exercise 4 gives skill in lifting up the pen and putting it down again. Sharp and clean-cut marks must result and the pen must make these marks without feathers, blurs, or shaky lines. This quality is not



accomplished by speedy motions or flourishings of the pen. It is a careful making of marks that are alike, clean and regular, and evenly spaced.

Fifth Mark

Exercise 5 gives more practice in the free-arm movement. It is used in forming many letters, and it is necessary that it be made regular and with an ever-



growing curve. Much patient practice will accomplish this mark properly.

Sixth Mark

The reverse of the preceding mark is done in Exer-

cise 6 and gives opposite curve practice. It forms a part of many letters, and it is just as essential that it be made smooth and regular.

Seventh and Eighth Marks

Exercises 7 and 8 show smaller marks that may be made exactly the same way as the larger ones, or, as shown, may be terminated by a thin mark. The marks form part of many lower-case letters. See Plate 17. The point at the end is accomplished by giving the pen a slight upward movement. The right-side curve, like this, begins with a slight up-mark that makes a short fine line, and then the stroke is completed the same as in stroke 2, but smaller. The strokes form parts of many letters, as will be noted when word lettering is being done.

Ninth and Tenth Marks

Exercises 9 and 10 show more variations which must be mastered in the preliminary work. The small one is used in parts of many lower-case letters and also on capitals. The larger stroke is part of capital letters, and, to do it, you will discover why the free-arm movement must be used.

Eleventh Mark

In Exercise 11, a regular slant is given to the mark. This stroke is given because it is used in capital A and is difficult to do smoothly and uniformly. In most cases, the slant is about at right angles to the opposite leg of the letter. In practice, use this slant. It may be made steeper if it is necessary to make a condensed letter. See Plate 10.

Twelfth and Thirteenth Marks

Exercises 12 and 13 are done in two or more lengths, according to the use. They are horizontal double curves that require the free-arm movement. They form parts of many letters and must be made smooth and regular.

Fourteenth Mark

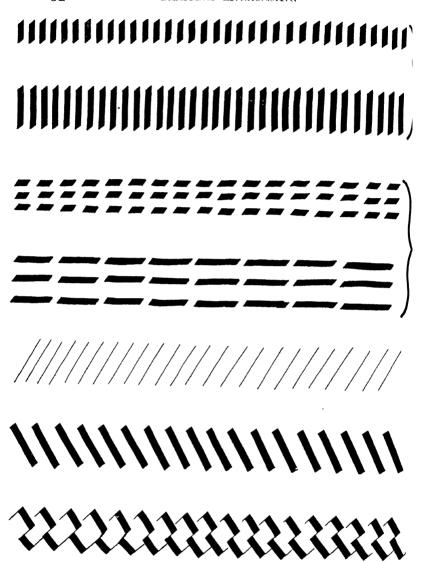
The ability to make a uniform, straight vertical mark, Exercise 14, is an accomplishment, indeed. To do this, the engrosser must sit up straight and have his work directly in front, as the paper is held exactly horizontal. Vertical guide lines on the guide paper will indicate whether the lines are being made vertical or not. This exercise is given emphasis because, in the kind of letter used in most diploma engrossing, straight lines form many of the principal parts of the letters. The strokes must be made deliberately, not with flourishes or quickly, but firmly and without shaking. It will take time to do this line as it should be done.

Fifteenth Mark

In Exercise 15, the beginner is guided in making a straight line, horizontally. This gives practice in steadiness and in placing the pen on and lifting it from the paper.

Sixteenth Mark.

Exercise 16 is especially important. The pen is moved so that it makes a line the weight of which is as much as the pen will make when moved left-down at the slant it is held. This stroke is the left leg of letter A.



Seventeenth Mark

The full width of the pen makes this mark, Exercise 17, as it is held at the slant being used. This mark is another which gives needed experience.

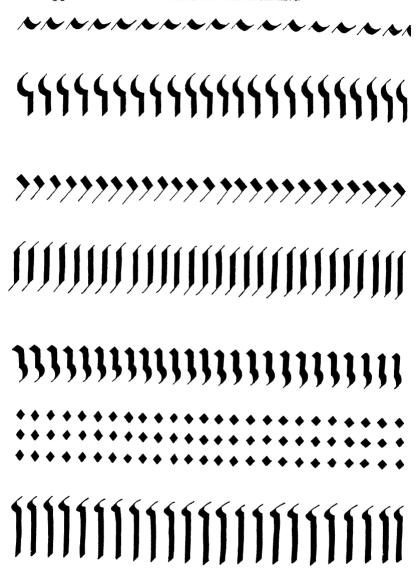
CHILLICULLULU 23 111111111111111111111111111

Eighteenth Mark

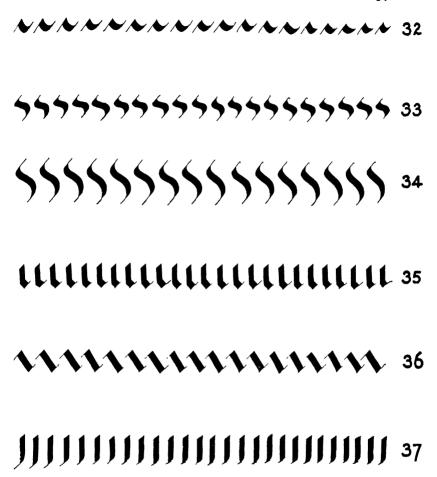
The zigzag marks shown in Exercise 18 are made to give more practice with the pen so that the beginner will know whether he is holding the pen properly.

Necessity of Mastering

The strokes from Exercises 19 to 37 are the foundation ones of Old English style of diploma engrossing.



They are made with regular straight lines and angular marks and most of them terminate with thin lines. The beginner must accomplish these marks skillfully. They are all used in the common work of engrossing and there must be no hesitancy in making them, to be



an efficient engrosser. Attention is called to Exercise 30. This is a period. The comma has a short, fine line at the bottom. Attention is also called to Exercises 33 and 34. These curves are used to make both the lower-case and capital S.

After these curves have been thoroughly mastered, the beginner is ready to start work on the regular engrossing alphabet.

As said before, the letter style most commonly used in engrossing diplomas is Old English. It is based on

a a a a a a a a a a a a cercececece 88888888888888 v. eccecececece 9999999999999

PLATE 16

straight lines, but there are many variations and styles of letters that are used. The accomplished worker will

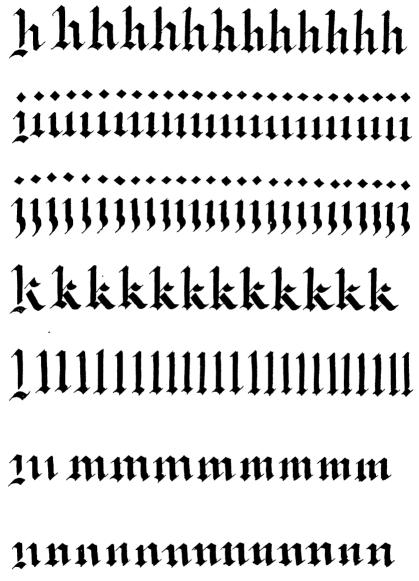


PLATE 17

be able to select and execute the style of letter he wishes for the particular job he has to do.

Inasmuch as the Old English that is made on straight

000000000000000 haddddddddddddd 999999999999 Trrrrrrrrrrr 9999999999999 5555555555555 1-111111111111

PLATE 18

lines is appropriate for diploma work, that is the kind that will be illustrated here. The whole alphabet is shown, Plates 16-23, pages 38-45.

At the beginning of each line, it will be noted that the marks used in that letter are made unattached so

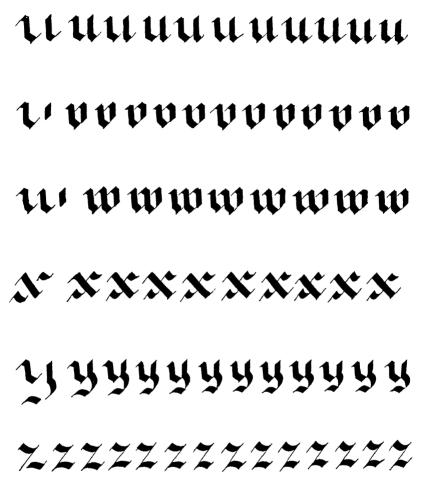


PLATE 19

the beginner will see how they are made and joined. The engrosser, in making these lines of letters, may check this skill by comparing each letter in his lines and noting whether each one is exactly like the next one. They must all be made alike in width and style. If there is a variation in the letters when formed in words the engrossing is not first class.

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PLATE 21

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Finishing the Job

Engrossing Words

It is now assumed that all of the Old English letters have been mastered and the engrosser is ready to use them. Unless otherwise guided, the size and style of letter best to be used on a diploma will be determined by judgment based on experience and a developed sense of appropriateness. If the diploma form is printed or engraved in the regular Old English, then the name should be done in the same style but in a size that will give it prominence. This may be gained by larger lettering or by allowing plenty of white space around it. Considerable thought should be given to this matter before the first diploma is done. Names should be engrossed, first, exactly in the sizes and styles that might be used, on strips of paper, and then placed in position on the diploma. By experimenting thus, the proper style and size may be determined.

Determining the Guide Lines

Now that the preliminary line of lettering has been settled, guide lines are drawn on it. See Plate 24. The spacing of these lines is taken and drawn in ink on tissue or some clear paper. The vertical guide lines, drawn on another sheet or the same sheet, are placed on the light table and fastened with masking tape. The diploma is placed in position over the guide lines. The position is marked on the guide-lines sheet, and gauge pins are fastened at two places on the top and one at the left to keep the position the same on succeeding diplomas as the names are being engrossed. In Plate 2,



PLATE 24. How the Guide Lines Are Taken From a Line of Lettering

The name is lettered first to get the proper size for the job about to be done. Then guide lines are taken from it, as shown.

the vertical and horizontal guide lines are shown, and, also, the guides in place. In Plate 5, the diploma is in place and being engrossed.

Centering the Names

One of the most important skills that must be developed in diploma work is centering the name on the diploma. An experienced engrosser will be able to do this by feel or sight after much practice. He should be able to begin the name at the left so that it will end at the right place and be centered. To make speed, he must be able to do so. Note centered name on engrossed diploma in Plate 14.

The beginner, as a substitute for this skill, should engross a long name in the style of letter he will use on his job. Then number each letter and the spaces between words and use this for judging the spacing of the line. See line of letters in Plate 6. At the top of the picture is a strip of lettering, "Machine Works, Inc.," that has been numbered.

Count the number of letters in the name that is to be done on the diploma in hand and note the center of this particular name. Take that many letters to the left of the center line. Where the end of the numbered line of letters comes at the left will be the spot to begin the work on the diploma. For instance, the name to be done has twenty letters. On the numbered, engrossed name, measure the first ten letters and locate the spot that distance from the center line, and it will be the spot to begin lettering the name that is about to be done on the diploma.

This should be practiced enough so that the engrosser will become proficient in locating this spot at a glance, without the lettered name at hand.

Preparing the Numbered Name

In selecting the name to be numbered and used in centering, a name should be used that is average. That is, it should not be made up predominantly of l's, m's, or w's. If the name to be done has many such letters, they must be considered, and judgment used in arriving at the beginning spot. Letters such as I should be given half as much space as a, and m's should be given twice as much. For example, if the name Zimmerman is to be done, the m's must be given more space than the l's in Kellerman. A bit of common sense must be used in this work.

Letters in Words Should be Close

When lettering words and names on diplomas or for any other job, the letters should be done close together. When the reader sees them, he should see the word and not merely a line of letters. If the letters have too much space between them, a reader will be likely to spell out the word and not see it in its entirety at a glance.

When letters must take more or less than normal space, the angle of the pen must also be more or less

PLATE 25. Touching Up and Decorating an Engrossed Name

The sides of the letters are straightened and the serifs sharpened. Usual marks are put on the capital letter M. This work is done with a ruling pen and a fine-point pen. A thin ink is best.



than when making letters ordinarily. There are times when a word must be made shorter or longer to fit a certain space; then the angle of the pen must be changed or the word, itself, made closer. See Plate 10.

The space between words may be determined by using the amount of space that one average letter such as a, takes.

These variations come in all engrossing. That is why the craft has continued to exist. Many times a handlettered job must be done because type cannot be made to fit the space. Also, the slight variation of handwork gives a certain character to the finished job that sets it apart as a work of art and takes it out of the commercial class.

In actually doing lists of diplomas, it is easier to judge the centering from handwritten lists than from those that have been typed. Obviously, the typewriter makes all letters the same width, but handwriting gives each letter its natural width.

Pointing the Serifs and Corners

It is assumed, now, that the beginner has completed the job of engrossing a number of diplomas, and, in doing them, details of serifs (corners of letters), may not be as sharp and true as they should be. This con-



PLATE 26. MORE ELABORATE DECORATION

Extra pen work sometimes appeals to certain tastes, but it is not widely used. It is done with a fine-point pen held sideways. The strokes must be made with one swing of the hand. The curves cannot be touched up or corrected.

dition may be improved by touching up the letters with a fine-point pen. See Plate 25.

The best ink for this purpose is a thin carbon black ink. Go over the letters, pointing the scrifs and corners and connecting parts of them, so that they will look more finished.

Decorating the Names

Still more attraction may be added to the job if the names are decorated. See Plate 26. This kind of decoration is not done as much now as in years past. If it strikes the fancy of the customer, however, then it is done.

To decorate a name well, considerable practice is necessary. It must be well done or not at all. Take a springy pen that can be handled easily and practice making the strokes from left to right. The marks over the top are done; then the diploma is turned upside down and the same lines are put on the bottom, to balance those on the top. See Plate 7. Always work with the same motion and stroke and weight of line so that the curves will be uniform. It will require considerable practice to attain this skill. Many engrossers specialize in this kind of embellishing. It is not easy to do well.

Materials

Paper for Diplomas and Scrolls

In most cases with diplomas, the blanks have been done and the paper for them selected by persons for whom they are to be lettered. With scrolls, the engrosser may be permitted to select the kind of paper that would be best for the job.

The best paper upon which to do fine engrossing, be it diploma or scroll, is one with a hard, smooth surface, free of kaolin. If there are minute granules or fuzz on the surface of the paper, it is not possible to make clean-cut letters. The pen will trip on the uneven spots and clog with the fine shreds of the paper.

If the paper is 100 per cent. rag, it is good. Such paper will not tear as easily as paper made of wood pulp. It tears hard, with a rough edge, and the fibers may be seen, while the pulp paper breaks and tears easily. Papers such as are used for deeds and other uses which require a substance that holds its strength for years are best for engrossing. These papers are classified as parchment, ledgers, and the high-rag-content, heavy bonds.

Paper dealers who can be depended upon and know their goods will be able to supply the proper paper. The engrosser must find a good dealer and rely upon him.

It is much more satisfactory to do engrossing on a heavy grade of paper. It should be as heavy as possible and still permit the guide lines to show underneath. It is possible to see through much thicker paper at night or in subdued room light than in broad daylight. The diffused sunlight takes away the strength of the reflected light of the light table. Also, one's eyes tend to close up more in daylight and make it impossible to see through the thicker papers.

Experiment With Paper Samples

When selecting a paper for any use, it is best to take a sample and try it. Do some lettering on it and then erase the lettering and note if the body of the paper is the same color as the surface. Then letter over this spot again. Find out how many times this may be done on the same spot and still be presentable. Try the tearing strength of the paper. If it tears easily, then it is low in rag content, is not durable, and will not do well for engrossing. Notice how it folds. If it folds hard and not with a sharp crease, then it is high in rag content and is of good quality.

American-made paper is produced that is excellent for engrossing. Paper dealers in the large cities carry them. The brand name is a guarantee of their quality. Their watermarks cannot be erased or imitated. They may be depended upon to be as represented.

Advancing in the Work

Making Testimonials and Scrolls

When engrossing testimonials, scrolls, or resolutions, special guide lines must be made for the particular job to be done.

The nature and quality of the job in hand must be studied, and then each display line must be carefully engrossed exactly to the size that it will appear in the final job. Enough of the body matter must be engrossed to determine how many lines the job will take when finished. It might be better to engross the whole job so that an exact dummy may be made up, with all lines pasted in position or held with Scotch tape or other transparent gum paper. Plate 6 shows the pasted-up dummy.

There must be a center line on the dummy and all lines placed in balanced position and fastened in place. If a large illuminated letter is used, it must be fairly well done in accurate size and shape and mounted in place. After this dummy has been approved and studied for mistakes, corrections, or improvements, then the guide lines are taken from it and ruled on the thin paper. Plate 14 shows guide lines that have been taken directly from the dummy. These guide lines, attached to the light table, are used for the final engrossing. See Plate 14, showing the completed job in the leather cover on the left side of the table.

Getting Guide Lines for Scroll

To go into detail concerning how to make the guide lines for such a job (see Plate 27), this procedure

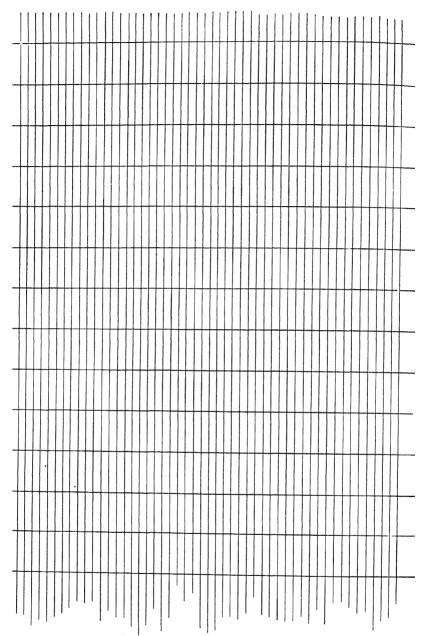


PLATE 27. TYPICAL GUIDE LINES

These guide lines were used in making all the foundation exercises and Old English letters shown in this book.

should be followed: To get the guide lines from the dummy, mount it on the table, and, with the T square, mark the heights of the capital and lower-case letters at the left margin of the paper where it extends under the dummy. Then take up the dummy, leaving the tissue on the table, and complete the guide lines across the sheet. See Plate 24. Be sure to make the guide lines long enough. They should be longer than the job is wide. Draw the guide lines carefully in ink with a ruling pen. Then make a center line. Then draw vertical lines $\frac{1}{16}$ to $\frac{1}{8}$ apart up through the guide lines. A triangle may be used for this. This is done to make sure that the letters are made vertical. It is not sure enough to depend on the eye for this quality.

Value of the Dummy

The care, accuracy, and time taken to make a good dummy and guide lines will more than pay in speed and good quality of the completed job. It is not always possible to change a line once it is engrossed on the final job.

When beginning the job of engrossing the scroll, the dummy is in hand and the text, lettered correctly, of each line that is to be done in making it is held directly above that line as it is being engrossed, to make sure this line is begun at the right spot on the final job. Not only the position but the character of the final letters is determined by those done on the dummy. The dummy is an exact guide. As the lines are done, the dummy is rolled up as it is used. If the dummy is accurately spaced, the final job will be correct.

Finishing the Engrossed Job

When all of the engrossing has been completed, the

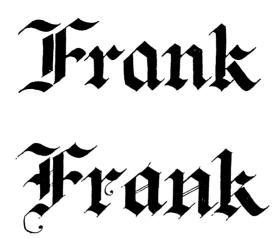


PLATE 28. LINED LETTERS

Letters are lined on the sides with a ruling pen, T square, and triangle. Considerable concentration is necessary, and the pen must be working right. If the line is made too heavy, the ink may come down too fast and make a blob. To make a finished-looking scroll, the large lettering must be lined and touched up. Otherwise it will look dull and unworkmanlike. The difference is readily noticed by comparing the two examples.

letters should be touched up and the serifs pointed. If there are parts of letters that require fine, straight lines drawn in vertically or horizontally, such as the legs of the capital N, this should be done with a ruling pen. See Plate 6. Great skill and sureness of execution must be attained by the engrosser before he puts such lines on his letters.

If there are high letters, or low letters, that are not true and straight and vertical, the ruling pen should be used to mark a very fine line along the sides of these letters. See Plate 28. This will give a finished look and correct the imperfect letters, if they are not too bad. Before this job is done, it should be practiced until it can be done accurately and with a sure and steady

hand. Sometimes the ink will run out of the ruling pen in a blob if the ink on the letter is not thoroughly dry. Sometimes it does, even when the ink is dry, if the ruling pen is too full or if ink is too thin. Plenty of experience is necessary when doing the finishing, since little embellishments may be put on at this stage. Again see Plate 28.

Making Changes

In most cases, it is impossible to make changes in letters. That depends upon the amount of change and the quality of the paper being used. It is better not to try it because it usually shows and more time is wasted in making the change than in doing the job over. If good qualities of paper are used, in the heavy weights, then a letter may be changed with but slight detection. But, in erasing, the sheen of the paper is dulled at that spot, which may be seen when held at a slant to the light. Great care must be taken in erasing so that the fiber of the paper is not roughened and fuzzed. Be sure all of the letter is thoroughly erased. No trace of the letter may remain in the paper.

When the letter is done over on this spot, the pen should carry only enough ink to make this one letter. Sometimes, if there is too much ink in the pen, it will be drawn, by capillary attraction, down into the fibers and a dark spot will appear.

Using Skin Parchment

If genuine skin parchment is used, it is not possible to take out a letter and put in another one on the same spot. However, this is not so with paper parchment. The best diplomas are done on skin. With good water-

proof ink, skin parchment will not be ruined if it gets wet. It will return to its original shape, with some shrinkage, but the engrossing will remain as clear as when first done. If a letter is taken out, it can be done only by erasing enough of the skin away with a rubber until it is down into the skin far enough to remove the ink. It is impossible to letter over this spot without it showing. The skin will be ragged and the ink will run in the pores. This is proof against changing or tampering. Genuine skin is the most enduring material. Work done by the monks in the fifteenth century apparently is as bright now as when done. The skin is firm and the inks are sharp and clear. The quality of genuine skin is much more pleasing than any paper. Paper is easier to engross but skin is more satisfactory.

Work of the Monks

It is not the purpose of this book to cover the whole subject of engrossing. Yet it would be impossible to introduce it adequately without going into the history of the art. Modern work is based on that done by the monks before the time of printing. It continued after that time, about the time of Columbus, when printed books were illuminated by hand. Work done then has not been improved upon, except, perhaps, in detail, due to our better pens. The old manuscript books still exist and may be seen in our big city libraries. They are bright and the colors are not faded. The gold is not tarnished and the fine lines are clear and distinct. The inks used were natural and not affected by light and atmosphere, and the gold was real. After seeing and studying them, appreciation of the work is felt, when conditions under which they were made are

learned. The figure work in the embellishments has not been done better in modern times and the quality of the lettering is remarkable, although it may not be as sharp as our modern pens are capable of doing. They used a quill or wooden pen. A careful study of work done by these early artists would be an inspiration to any aspiring engrosser.

Variations in Letter Forms

Because there are so many variations of design by which letters may be made when using them as initials or otherwise, it would not be plausible to introduce them in this book. The engrosser must study the kind he is able to make, copy those done by the monks, make up his own collection, and have it ready to use when needed.

This is true, also, of decorations and embellishments. Through practice, a style of work should be developed by the engrosser. It should be something he can do well and be capable of using in his work any time.

There are books showing this kind of embellishing done by the monks that should be available and studied.

Gold Initials

When doing initials in gold, it is best to use genuine gold. (The same pen is used.) Real gold is expensive, but it looks better and the color is right. It will not darken. There are a number of gold-colored bronze powders that may be used with a prepared bronzing liquid that last fairly well, but they do not look as good as the genuine.

When combining ruling and embellishing gold initials, considerable practice must be done before the

Commercial Style L Slaut Style Lettering Simulated Modern Another Variation of Back Hand is possible Eurved Text Letter CAPITAL LETTERS

PLATE 29. OTHER STYLES OF LETTERS

A few original styles are shown to illustrate the wide use of the pen. They are given to encourage the learning engrosser to explore the possibilities of his pens. It is well to make such experimental alphabets carefully. Careless and shabby practice will lead to poor work, and time spent doing it will be worse than just wasted. job is completed. The gold must be of proper consistency to look good—not too thin or too thick. This must be learned through experience and practice. When adding other colors to gold or next to it, the gold must be dry and hard or the color will run into it and the job will be spoiled. This is an uncertain job and must be done with the utmost skill and with a steady hand. It is best not to try to blot a blurred letter. It is easier to erase when it is dried hard.

Alphabet Styles

It is not necessary or possible to show all or a small part of the alphabet styles that can be done with these pens. The real purpose of this book is to introduce the work to the interested and ambitious prospective engrosser. Many an accomplished penman is able to originate a style of letter that is different. See Plate 29. It can be specially designed for a particular kind of job. The guiding exercises, and the foundation Old English alphabet, if skillfully accomplished, are enough to point the way to a beginner. After he has mastered the skills described herein, he should be on the road to further accomplishment. The important thing is to be willing to learn at all times and to put forth careful and persistent effort and practice if he would become an engrosser.

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